Title 33
ENVIRONMENTAL QUALITY

Part VII. Solid Waste

Chapter 14. Composting Facilities

§1401. Part I: Permit Application Form

The applicant shall complete a standard permit application Part I Form (Appendix B). The following subsections refer to the items on the form requiring that information:

A. name of applicant (prospective permit holder) applying for a standard permit;

B. facility name;

C. description of the location of the facility (identify by street and number or by intersection of roads, or by mileage and direction from an intersection);

D. geographic location (section, township, range, and parish where the facility is located, and the coordinates [as defined by the longitude and latitude to the second] of the centerpoint of the facility);

E. mailing address of the applicant;

F. contact person for the applicant (position or title of the contact person is acceptable);

G. telephone number of the contact person;

H. type and purpose of operation (check each applicable box);

I. status of the facility (if leased, state the number of years of the lease and provide a copy of the lease agreement);

J. operational status of the facility;

K. total site acreage and the amount of acreage that will be used for processing and/or disposal;

L. list of all environmental permits that relate directly to the facility represented in this application;

M. a letter attached from the Louisiana Resource Recovery and Development Authority (LRRDA) stating that the operation conforms with the applicable statewide plan. (Note: In accordance with R.S. 30:2307.B, this regulation does not apply to solid waste disposal activity occurring entirely within the boundaries of a plant, industry, or business which generates such solid waste);

N. zoning of the facility (if the facility is zoned, note the zone classification and zoning authority, and include a zoning affidavit or other documentation stating that the proposed use does

not violate existing land-use requirements);

O. types, maximum quantities (wet tons/week), and sources (percentage of the on-site or off-site-generated waste to be received) of waste to be processed or disposed of by the facility;

P. indicate the specific geographic area(s) to be serviced by the solid waste facility;

Q. attach proof of publication of the notice regarding the submittal of the permit application as required in LAC 33:VII.513.A;

R. provide the signature, typed name, and title of the individual authorized to sign the application. Proof of the legal authority of the signatory to sign for the applicant must be provided; and

S. any additional information required by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).**§1403 Part II: Supplementary Information**

All responses and exhibits must be identified in the following sequence to facilitate the evaluation. If a section does not apply, the applicant must state that it does not apply and explain why.

A. Location Characteristics.

1. Area Master Plans—A location map showing the facility, road network, major drainage systems, drainage-flow patterns, location of closest population center(s), location of the public-use airport(s) used by turbojet aircraft or piston-type aircraft, proof of notification of affected airport and Federal Aviation Administration, location of the l00-year flood plain, and other pertinent information. The scale of the maps and drawings must be legible, and engineering drawings or USGS maps are required.

a. Facilities that compost putrescible solid waste shall not be located within 10,000 feet of any public-

use airport runway used by turbojet aircraft or within 5,000 feet of any public-use airport runway used by only piston-type aircraft.

2. A letter from the appropriate agency or agencies regarding those facilities receiving waste generated off-site, stating that the facility will not have a significant adverse impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles.

3. Existing Land Use. Processing facilities may be subject to a comprehensive land-use or zoning plan established by local regulations or ordinances. A description of the total existing land use within three miles of the facility (by approximate percentage) including, but not limited to:

a. residential;

b. health-care facilities and schools;

c. agricultural;

d. industrial and manufacturing;

e. other commercial;

f. recreational; and

g. undeveloped.

4. Aerial Photograph. A current aerial photograph, representative of the current land use, of a one-mile radius surrounding the facility. The aerial photograph shall be of sufficient scale to depict all pertinent features.

5. Environmental Characteristics.

a. a list of all swamps, marshes, wetlands, estuaries, wildlife-hatchery areas, habitat of endangered species, publicly owned recreation areas, known historic sites, archaeologic sites, designated wildlife-management areas, and other sensitive ecologic areas within l,000 feet of the facility perimeter or as otherwise appropriate. These and other similar critical environmental areas shall be isolated from the facility by effective barriers.

b. documentation from the appropriate state and federal agencies substantiating the historic sites, recreation areas, archaeologic sites, designated wildlife-management areas, wetlands, habitats for endangered species, and other sensitive ecologic areas within l,000 feet of the facility; if any exist, and

c. a description of the measures planned to protect the areas listed from the adverse impact of operation at the facility.

d. A wetlands demonstration, if applicable.

e. Demographic Information. The estimated population density within a three mile radius of the facility boundary, based on the latest census figures.

B. Facility Characteristics. A facility plan, including drawings and a narritive, describing the information required below must be provided.

1. Elements of the process employed, including, as applicable, property lines, original contours (shown at not greater than five-foot intervals), buildings, units of the facility, drainage, ditches and roads;

2. Perimeter Barriers, Security, and Signs

a. Facilities must have a perimeter barrier around the facility that prevents unauthorized ingress or egress, except by willful entry.

b. Each facility entry point shall be continuously monitored, manned, or secured.

c. Facilities that receive wastes from off-site sources shall post readable signs that list the types of wastes that can be received at the facility.

3. Buffer zones

a. Buffer zones of not less than 50 feet shall be provided between the facility and the property line. A

reduction in this requirement shall be allowed only with the permission, in the form of a notarized affidavit, of the adjoining landowner(s) including all landowners if in *in division.* A copy of the notarized affidavit waiving the 50-foot buffer zone shall be entered in the mortgage and conveyance records of the parish for the adjoining landowner's property. Buffer zone requirements may be waived or modified by the administrative authority in accordance with LAC 33:VII.307.

b. Composting facilities which receive sewage sludge, septage, residential, or commercial waste must have a 200 feet buffer-zone.

c. No storage, processing, or disposal of solid waste shall occur within the buffer zone.

4. Fire Protection and Medical Care. All facilities shall have access to required fire protection and medical care, or such services shall be provided internally.

5. Landscaping. All proposed facilities, other than those that are located within the boundaries of a plant, industry, or business that generates the waste to be processed, must provide landscaping to improve the aesthetics of the facility.

6. Receiving and Monitoring Incoming Wastes

a. Each processing or disposal facility shall be equipped with a device or method to determine quantity (by wet-weight tonnage), sources (whether the waste was generated in-state or out-of-state), and types of incoming waste. The facility shall also be equipped with a device or method to control entry of the waste and prevent entry of unrecorded or unauthorized deliverables (i.e., hazardous, unauthorized, or unpermitted solid waste).

b. Each processing or disposal facility shall be equipped with a central control and recordkeeping system for tabulating the information required in Subsection B.5.a. of this Section.

7. Permitted discharge points (existing and proposed); and

8. Other features, as appropriate.

C. Facility Surface Hydrology.

1. Facilities located in a flood plain, wetlands, or areas historically subject to overflow from floods must be filled to bring site elevation above flood levels or otherwise protected by measures approved on a site-specific basis. Perimeter levees or other measures must provide and maintain adequate protection against the 25-year flood elevation.

2. Facilities located in or within 1,000 feet of an aquifer recharge zone shall be designed to protect the areas from adverse impacts of operations at the facility.

3. Surface-runoff-diversion levees, canals, or devices shall be installed to prevent drainage from the units of the facility to adjoining areas and to prevent surface drainage through the operating areas of the facility.

4. If the facility is located in a flood plain, a plan must be submitted to ensure that the facility does not restrict the flow of the 100-year base flood or significantly reduce the temporary water-storage capacity of the flood plain, and documentation indicating that the design of the facility is such that the flooding does not affect the integrity of the facility or result in the washout of solid waste so as to pose a threat to human health and the environment.

5. Runoff from operating areas or areas which contain solid waste shall be considered contaminated and shall not be allowed to mix with noncontaminated surface runoff.

a. Provide a description of the facility runoff/run-on collection system;

b. Discharges from operating units of all facilities must be controlled and must conform to applicable state and federal laws including the federal Clean Water Act and Louisiana Water Pollution Control Law.

c. Applications for applicable state and federal discharge permits must be filed before a standard permit may be issued.

6. A run-on control system shall be installed to prevent run-on during the peak discharge from a 24 hour hour 25 year storm event.

7. The topography of the facility shall be graded to provide for drainage to prevent standing water and shall allow for drainage away from the facility.

D. Facility Geology.

1. Except as provided in Subsection D.2 of this Section, facilities shall have natural stable soils of low permeability for the area occupied by the solid waste facility, including vehicle parking and turnaround areas, that should provide a barrier to prevent any penetration of surface spills into groundwater aquifers underlying the area or to a sand or other water-bearing stratum that would provide a conduit to such aquifers.

2. A design for surfacing natural soils that do not meet the requirement in Subsection D.l of this Section shall be prepared and installed under the supervision of a registered engineer, licensed in the state of Louisiana, with expertise in geotechnical engineering and geohydrology. Written certification by the engineer that the surface satisfies the requirements of Subsection D.l of this Section shall be provided.

3. general description of the soils provided by a qualified professional (a geotechnical engineer, soil scientist, or geologist) along with a description of the method used to determine soil characteristics; and

4. logs of all known soil borings taken on the facility and a description of the methods used to seal abandoned soil borings.

5. The working area in the facility used to compost biosolids, municipal solid waste, or other highly putrescible waste with a significant potential for odor or requiring bacterial reduction

shall have hard surfacing to provide for working in wet weather. The site shall be located on stable soils capeable of being compacted to support the equipment being used.

E. Facility Plans and Specifications.

1. Certification— Plans, specifications, and operations represented and described in the permit application or permit modifications for all facilities must be prepared under the supervision of and certified by a registered engineer, licensed in the state of Louisiana. The person who prepared the permit application must provide the following certification:

"I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this permit application and that the facility as described in this permit application meets the requirements of the Solid Waste Rules and Regulations. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."

2. Levee Construction

a. Levees or other protective measures must be constructed adjacent to the facility in order to provide an adequate freeboard above the 25-year flood elevation.

b. The perimeter levees of all facilities shall be engineered to minimize wind and water erosion and shall have a grass cover or other protective cover to preserve structural integrity.

3. Leachate Management

a. Leachate produced in the composting process must be collected and treated or disposed of at a permitted facility; or

b. leachate may also be reused in the composting process as a source of moisture.

G. Facility Administrative Procedures

1. Recordkeeping and Reports

a. The permit holder shall submit annual reports to the administrative authority indicating quantities and types of solid waste (expressed in wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. All calculations used to determine the amounts of solid waste received for processing during the annual-reporting period shall be submitted to the administrative authority. A form to be used for this purpose must be obtained from the Department.

b. The reporting period for the Processor and/or disposer annual report shall be from July l through June 30, commencing July 1, 1992, and terminating upon closure of the facility in accordance with the permit.

c. Annual reports shall be submitted to the administrative authority by August l of each reporting year.

d. The annual report is to be provided for each individual permitted facility on a separate annual reporting form.

e. The annual reports for composting facilities shall identify the quantity (expressed in wet-weight tons per year) and types of material distributed for reuse and/or recy-cling, the ultimate use of the product and the quantity (expressed in wet-weight tons per year) of solid waste disposed. The report shall also identify the permitted facility used for the disposal of the waste.

f. The permit holder shall maintain at an approved designated location all records specified in the application as necessary for the effective management of the facility and for preparing the required reports. These records shall be maintained for the life of the facility and shall be kept on file for at least three years after closure.

g. The permit holder shall maintain records of transporters transporting waste for processing or

disposal. The records shall include the date of receipt of shipments of waste and the transporter's solid waste identification number issued by the Department.

h. Records kept on site for all facilities shall include, but not be limited to:

i. copies of the applicable Louisiana Solid Waste Rules and Regulations;

ii. the permit;

iii. the permit application; and

iv. permit modifications.

2. Personnel—an estimate of the minimum personnel, listed by general job classification, required to operate the facility.

a. Facilities shall have the personnel necessary to achieve the operational requirements of the facility.

b. Type III facilities receiving solid waste for composting shall have the number and levels of certified operators employed at the facility as required by the Louisiana Administrative Code, Title 46, Part XXIII. Operator certificates shall be prominently displayed at the facility. The Board of Certification and Training for Solid Waste Disposal System Operators and the Department shall be notified within 30 days of any changes in the employment status of certified operators.

3. maximum days of operation per week and per facility operating day (maximum hours of operation within a 24-hour period).

H. Facility Operational Plans

1. Facility Limitations

a. The receipt of hazardous waste shall be strictly prohibited and prevented. Any other wastes that present special handling or disposal problems may be excluded by the administrative authority.

b. Open burning shall not be practiced.

c. Salvaging shall be prevented unless approved by the administrative authority.

d. Scavenging shall be prevented.

e. The following types of wastes require a Type III composting permit:

i. sewage sludge or septage as defined in LAC 33:VII.ll5;

ii. residential or commercial solid waste as defined in LAC 33:VII.ll5;

iii. other materials deemed acceptable by the administrative authority.

f. The processing of infectious waste and asbestos waste shall be strictly prohibited and prevented.

g. No solid waste shall be deposited in standing water.

h. Yard trash, woodwaste, agricultural processing and production residues, manures, stable bedding, or other materials deemed acceptable by the adminstrative athourity may be composted under a Best Management Practice plan registerd with and approved by the Department of Agriculture and adminstered under their jurisdiction.

2. Facility Operational Plans. Operational plans shall be provided which describe in specific detail how the waste will be managed during all phases of processing operations. At a minimum, the plan shall address:

a. the route the waste will follow after receipt;

b. the sequence in which the waste will be processed within a unit;

c. the method and operational changes that will be used during wet weather (particular attention should be given to maintenance of access roads and to water management); and

d. the recordkeeping procedures to be employed to ensure that all pertinent activities are properly documented.

3. Facility Operational Standards

a. Composting facilities which receive domestic septage or sewage sludge from publicly owned treatment works shall require the waste be tested for toxicity characteristics leachate procedure (TCLP) analysis and priority pollutants prior to acceptance of the waste and annually for two years following acceptance. Each year thereafter, the generator must certify that the waste remains unchanged.

b. The operation of composting facilities shall be by methods which result in the aerobic, biological decomposition and stabilization of the organic material received.

c. The facility must be designed and operated to control vectors, odors, dust, and litter.

d. The operation of the composting facility must maintain aerobic conditions, minimize odors, produce a compost product acceptable to the administrative authority.

e. The compost must meet PFRP standards.

f. The facility must include areas for the following operations:

(a). receiving, mixing, composting, curing, compost storage, drying, screening, and truck wash area located on surfaces capable of preventing groundwater contamination (periodic inspections of the surface shall be made to ensure that the underlying soils and the surrounding land surface are not being contaminated);

(b). runoff collection system; and

(c). leachate collection and on-site/off-site treatment system if the leachate or runoff is to be discharged and not reused in the composting process..

h. Compost produced in or offered for sale in Louisiana shall be classified based on the type of waste processed, compost maturity, and recommended use The following characteristics shall be used:

i. Compost Maturity

(a). fresh organic matter—raw material before undergoing decomposition (or at beginning of process).

(b). fresh compost—organic matter that has been through the thermophilic stage and has undergone partial decomposition.

(c). semimature compost—compost material that has passsed through the thermophilic stage and is in the mesophilic stage.

(d). mature compost—a highly stabilized product which results from exposing compost to a prolonged period of humidification and mineralization, beyond the stage of maturity. Mature compost shall have

ii. Particle size shall be determined by using percantages of the material passing a standard screen set.

iii. The moisture content in the finished compost shall not exceed 45 ~~55~~ percent (by weight). The moisture content shall be determined by using the Environmental Protection Agency's approved methods.

iv. Concentration Levels (shown in mg/kg in dry weight) of finished compost:

Parameter	Category I	Category 2

Cadmium	<15	15 - 25
Copper	<450	450 - 1000
Lead	<200	200 - 800
Nickel	<50	50 - 100
Zinc	<1000	1000 - 2000

i. Finished Compost

i. The finished compost shall be sufficiently stable that it can be stored or applied to land without causing a health hazard, detriment, or nuisance to the environment as determined by the administrative authority.

ii. All distributed compost must be accompanied with a label or leaflet which indicates, at a minimum, the type of waste from which the compost was derived, any restriction on the use of the product, and recommended application rates.

iii. Compost derived from sewage sludge, septage, or residential or commercial waste must meet the criteria of the process to further reduce pathogens (Appendix E).

iv. Any compost made from solid waste which cannot be used pursuant to these regulations shall be reprocessed or disposed of in an approved solid waste facility.

v. Waste received at a composting facility shall be used as compost, sold as compost, or disposed of at a permitted disposal facility within 36 months after receipt.

vi. The sampling and testing methods shall be the Environmental Protection Agency's approved methods.

vii. Compost produced outside of the state of Louisiana, which is used or sold for use within the state, shall comply with the requirements of these regulations.

viii. Classes of Finished Compost

(a). Class M1—compost made only from manure or manure with yard trash and/or woodwaste which is mature or semimature, fine or medium, and which meets the metals concentrations of Category 1 of Subsection C.3.h.iv of this Section shall have unrestricted distribution except as provided in Subsection C.3.f.i of this Section.

(b). Class M2—compost made only from manure or manure with yard trash and/or woodwaste which is mature or semimature, fine or medium, and which meet the metals concentrations of Category 2 (but not of Category 1) of Subsection C.3.h.iv of this Section shall be restricted to use with non-food-chain crops.

(c). Class S1—compost made from solid waste, other than only manure or manure with yard trash and/or woodwaste, which is mature, fine, and which meets the metals concentrations in Category 1 of Subsection C.3.h.iv of this Section shall have unrestricted distribution except as provided in Subsection C.3.f.i of this Section.

(d). Class S2—compost made from solid waste, other than only manure or manure with yard trash and/or woodwaste, which is mature or semimature, fine or medium, and which meets concentrations in Category 1 or Category 2 of Subsection C.3.h.iv of this Section, but which does not meet the requirements of Class S1 compost, shall be restricted to use with non-food-chain crops and shall not be used in areas where public contact is likely, such as parks or recreation areas.

(e). Class YW-compost made only from yard trash and/or woodwaste which is mature or semimature, fine or medium shall have unrestricted distribution except as provided in Subsection C.3.f.i of this Section.

(f). All classes of compost shall be used in accordance with the maximum-loading rates provided in the following table and are subject to the restrictions provided in Subsection C.3.f.i of this Section. The following loading rates apply unless soil analyses of cation-exchange capacity and pH justify higher loadings.

	Maximum Applied Metal (lb/acre)
Lead	500
Zinc	250
Copper	125
Nickel	125
Cadmium	5

ix. Testing of Finished Compost. Composite samples of batches produced at compost facilities shall be analyzed in accordance with SW-846 at intervals of every three months for the following parameters:

(a). moisture;

(b). total nitrogen;

(c). total phosphorus;

(d). total potassium;

(e). pH;

(f). cadmium;

(g). copper;

(h). lead;

(I). nickel;

(j). zinc;

(k). fecal coliform (analyze in accordance with Standard Methods for the Examination of Water and Wastewater, 18th edition).

4. Sufficient equipment shall be provided and maintained at all facilities to meet the facility's operational needs.

5. Segregation of Waste

a. Composting facilities involving residential and commercial solid waste shall provide a waste-segregation plan and a recyclables separation program which shall be instituted prior to composting operations.

b. Wastes not intended for composting shall be removed from the facility to a permitted facility at least every seven days. Storage of wastes not intended for composting shall be in a closed container that prevents vector and odor problems. The facility shall maintain a log of dates and volumes of waste removed from the facility due to its inability to be composted.

c. Recyclable waste removed from the waste stream shall be stored in a manner that prevents vector and odor problems and shall be removed from the facility at least every 90 days. The facility shall maintain a log of dates and volumes of recycled waste removed from the facility.

6. Facility Operations, Emergency Procedures, and Contingency Plans

a. A plan outlining facility operations and emergency procedures to be followed in case of accident, fire, explosion, or other emergencies shall be developed and filed with the administrative authority and with the local fire department and the closest hospital or clinic. The plans shall be updated annually or when implementation demonstrates that a revision is needed.

b. Training sessions concerning the procedures outlined in Subsection C.6.a of this Section shall be conducted annually for all employees working at the facility. A copy of the training program shall be filed with the administrative authority.

I. Implementation Plans

1. The implementation plans for all facilities must include the following:

a. a construction schedule for existing facilities which shall include beginning and ending time-frames and time-frames for the installation of all major features such as

monitoring wells and liners. (Time-frames must be specified in days, with day one being the date of standard permit issuance); and

b. details on phased implementation if any proposed facility is to be constructed in phases.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).

J. Facility Closure Requirements

1. Notification of Intent to Close a Facility. All permit holders shall notify

a. date of planned closure, if known;

b. changes, if any, requested in the approved closure plan; and

c. closure schedule and estimated cost.

2. Closure Requirements

a. An insect and rodent inspection is required before closure. Extermination measures, if required, must be provided.

b. All remaining waste shall be removed to a permitted facility for disposal.

c. The permit holder shall verify that the underlying soils have not been contaminated in the operation of the facility. If contamination exists, a remediation/removal program must be provided to the administrative authority.

3. The closure plan must include the following:

a. the date of final closure;

b. the method to be used and steps necessary for closing the facility; and

c. the estimated cost of closure of the facility, based on the cost of hiring a third party to close the facility

at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive.

4. Upon determination by the administrative authority that a facility has completed closure in accordance with an approved plan, the administrative authority shall release the closure fund to the permit holder.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 20:1001 (September 1994).

L. Financial Responsibility. Standards governing financial responsibility are contained in LAC 33:VII.727. A section documenting financial responsibility according to LAC 33:VII.727 which contains the following information, must be included for all facilities:

1. the name and address of the person who currently owns the land and the name and address of the person who will own the land if the standard permit is granted (if different from the permit holder, provide a copy of the lease or document which evidences the permit holder's authority to occupy the property); or

2. the name of the agency or other public body that is requesting the standard permit; or, if the agency is a public corporation, its published annual report; or, if otherwise, the names of the principal owners, stockholders, general partners, or officers;

3. evidence of liability coverage, including:

a. personal injury, employees, and the public (coverage, carriers, and any exclusions or limitations);

b. property damage (coverage and carrier);

c. environmental risks; and

4. evidence of a financial assurance mechanism for closure and/or post-closure care and corrective action for known releases when needed.

M. Special Requirements. The administrative authority may require additional information for special processes or systems and for supplementary environmental analysis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 19:1143 (September 1993).**§1405. Part III: Additional Supplementary Information**

The following supplementary information is required for all solid waste processing and

disposal facilities. All responses and exhibits must be identified in the following sequence to facilitate the evaluation:

A. a discussion demonstrating that the potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible;

B. a cost-benefit analysis demonstrating that the social and economic benefits of the facility outweigh the environmental-impact costs;

C. a discussion and description of possible alternative projects which would offer more protection to the environment without unduly curtailing nonenvironmental benefits;

D. a discussion of possible alternative facilities which would offer more protection to the environment without unduly curtailing nonenvironmental benefits; and

E. a discussion and description of the mitigating measures which would offer more protection to the environment than the facility, as proposed, without unduly curtailing nonenvironmental benefits.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993).